

Sequence Match Listing

09/954456

ALIGNMENTS

Tue May 27 08:34:40 2003

us-09-

RESULT 1
AA432248 421 bp mRNA linear EST 22-MAY-1997
LOCUS AA432248
DEFINITION 3', mRNA sequence.
ACCESSION AA432248
VERSION AA432248.1 GI:2114636
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
REFERENCE 1 (bases 1 to 421)
AUTHORS Hillier, L., Allen, M., Bowles, L., Dubuque, T., Giesel, G., Jost, S.,
Kucaba, T., Lacy, M., Le, N., Lennon, G., Marra, M., Martin, J., Moore, B.,
Schellenberg, K., Steptoe, M., Tan, F., Theising, B., White, Y., Wyllie,
T., Waterston, R. and Wilson, R.
WashU-Merck Est Project 1997
JOURNAL Unpublished (1997)
COMMENT Contact: Wilson R
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: estwats@wustl.edu
This clone is available royalty-free through LNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -41m13 fwd. EF from Amerisham.
Location/Qualifiers

Query Match	100.0%	Score 421	DB 9	Length 421
Best Local Similarity	100.0%	Pred. No. 4.1e-58		
Matches 421; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
1	TTTTTTTTTTTTCATTGAAAATGCTTTAATAGTGTGACACACTGTTTGC	60		
1	TTTTTTTTTTTTCATTGAAAATGCTTTAATAGTGTGACACACTGTTTGC	60		
61	AATGTAAGATACATACCAATCTCTAATACAAAAGATTAATTAAGCAGATTCT	120		
61	AATGTAAGATACATACCAATCTCTAATACAAAAGATTAATTAAGCAGATTCT	120		
121	TTTTTAATTCGACACTTGTCTACAGTACATCTTTTCATTGATTAGTTGAAC	180		
121	TTTTTAATTCGACACTTGTCTACAGTACATCTTTTCATTGATTAGTTGAAC	180		
181	AATCCAGTAAATATCTTACAGCTCTACAGTACAGTACAGTACAGTACAGT	240		
181	AATCCAGTAAATATCTTACAGCTCTACAGTACAGTACAGTACAGTACAGT	240		
241	TCCCCCATTTAATACTAGAGTCCATTTTACACACTGTAATTAATCTATGAC	300		
241	TCCCCCATTTAATACTAGAGTCCATTTTACACACTGTAATTAATCTATGAC	300		
301	GTATATGTAAACTTTACACCTAGTTAAGTAAAGTAACTGATAGACCTG	360		
301	GTATATGTAAACTTTACACCTAGTTAAGTAAAGTAACTGATAGACCTG	360		
361	GATGGGTTTGGTATTTTGAACCTAATCTAATGTAATGAATGGAATTTTA	420		
361	GATGGGTTTGGTATTTTGAACCTAATCTAATGTAATGAATGGAATTTTA	420		
421	A 421			
421	A 421			

BASE COUNT 148 a 66 c 51 g 156 t

ORIGIN

1. 421
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:782283"
/clone_lib="Soares_testis_NHT"
/sex="male"
/lab_host="DH10B"
/note="Vector: pT73D-Pac (Pharmacia) with a modified
polylinker. Site 1: Not I; Site 2: Eco RI; 1st strand cDNA
was prepared from mRNA obtained from Clontech Laboratories
Inc., and primed with a Not I - oligo(dT) primer (5'
TGTTCCATCTGAGGAGGAGCGCCGCCCAATTTTCTTTTCTT 3').
Double-stranded cDNA was ligated to Eco RI adaptors
(Pharmacia), digested with Not I and cloned into the Not I
and Eco RI sites of the modified pT73D vector. Library
went through one round of normalization to Cots, and was
constructed by Benito Soares and M. Fatima Bonaldo."

RESULT 1
ABL65541 standard; DNA; 421 BP.

for seq 857

ABL65541;
15-MAY-2002 (first entry)
Lung cancer related gene sequence SEQ ID NO:3878.
Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
gene; ds.
KW
XX
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

A0665541

- cont -

PR 25-SEP-2000: 2000US-234923P
 PR 25-SEP-2000: 2000US-234924P
 PR 25-SEP-2000: 2000US-235077P
 PR 25-SEP-2000: 2000US-235082P
 PR 25-SEP-2000: 2000US-235134P
 PR 25-SEP-2000: 2000US-235280P
 PR 26-SEP-2000: 2000US-235637P
 PR 26-SEP-2000: 2000US-235638P
 PR 27-SEP-2000: 2000US-235711P
 PR 27-SEP-2000: 2000US-235720P
 PR 27-SEP-2000: 2000US-235840P
 PR 27-SEP-2000: 2000US-235863P
 PR 28-SEP-2000: 2000US-236028P
 PR 28-SEP-2000: 2000US-236032P
 PR 28-SEP-2000: 2000US-236033P
 PR 28-SEP-2000: 2000US-236034P
 PR 28-SEP-2000: 2000US-236109P
 PR 28-SEP-2000: 2000US-236111P
 PR 29-SEP-2000: 2000US-236842P
 PR 29-SEP-2000: 2000US-236891P
 PR 02-OCT-2000: 2000US-237172P
 PR 02-OCT-2000: 2000US-237173P
 PR 02-OCT-2000: 2000US-237278P
 PR 02-OCT-2000: 2000US-237294P
 PR 02-OCT-2000: 2000US-237295P
 PR 02-OCT-2000: 2000US-237316P
 PR 03-OCT-2000: 2000US-237425P
 PR 03-OCT-2000: 2000US-237598P
 PR 03-OCT-2000: 2000US-237604P
 PR 03-OCT-2000: 2000US-237606P
 PR 03-OCT-2000: 2000US-237608P
 PR 01-NOV-2000: 2000US-244867P
 PR 01-NOV-2000: 2000US-245084P
 PA (AVAL-) AVALON PHARM.
 PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;
 XX WPI: 2002-188264/24.
 DR
 XX
 XX
 PT Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set -
 PS Claim 1; SEQ ID 3878; 44pp; English.
 XX
 XX
 CC The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL6164
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytosolic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.
 CC
 XX
 SQ Sequence 421 BP: 148 A; 66 C; 51 G; 156 T; 0 other;

Query Match 100.0%; Score 421; DB 24; Length 421;
 Best Local Similarity 100.0%; Pred. No. 4.4e-74;
 Matches 421; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 TTTTTCATTTGGAATGCTTTAATAGTGTGACACACTGTTTGCAA 60
 QY 61 AATGTAAGACTATACAAATTCCTTAATACAAAAGAAATTAATTAAGACATTTCTT 120
 Db 61 AATGTAAGACTATACAAATTCCTTAATACAAAAGAAATTAATTAAGACATTTCTT 120
 QY 121 TTTTAAATTCGCAACTTGTCTCAACAGTACATCTTTTCATTGATTACAGTTGACAG 180
 Db 121 TTTTAAATTCGCAACTTGTCTCAACAGTACATCTTTTCATTGATTACAGTTGACAG 180
 QY 181 AATCCAGTAAATCATTTTACATGCTCTACAGTACAGTTCAGAGCAACCTAATCTTTT 240
 Db 181 AATCCAGTAAATCATTTTACATGCTCTACAGTACAGTTCAGAGCAACCTAATCTTTT 240
 QY 241 TCCCCATTTAATAGTACAGTCCATTTTACAACTTGTAAATTAATTTGACATTAAT 300
 Db 241 TCCCCATTTAATAGTACAGTCCATTTTACAACTTGTAAATTAATTTGACATTAAT 300
 QY 301 GTATATGTAAACTTTACACTAGTATACAGTACAGTACAGTACAGTACAGTACAGT 360
 Db 301 GTATATGTAAACTTTACACTAGTATACAGTACAGTACAGTACAGTACAGTACAGT 360
 QY 361 GATGGGTTTGTCTATTTTGAACCTAATTAATTAATTAATTAATTAATTAATTAAT 420
 Db 361 GATGGGTTTGTCTATTTTGAACCTAATTAATTAATTAATTAATTAATTAATTAAT 420
 QY 421 A 421
 Db 421 A 421

-0Y 1 TTTTTCATTTGGAATGCTTTAATAGTGTGACACACTGTTTGCAA 60
 TTTTTCATTTGGAATGCTTTAATAGTGTGACACACTGTTTGCAA 60

ALIGNMENTS

for SEU 12 NO: 995

RESULT 1
ABL65685
ID ABL65685 standard; DNA; 327 BP.
XX
AC ABL65685;
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:4022.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN M0200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001MO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

ABC 65785 - cont -

PR 25-SEP-2000; 2000US-234923P.
 PR 25-SEP-2000; 2000US-234924P.
 PR 25-SEP-2000; 2000US-235077P.
 PR 25-SEP-2000; 2000US-235082P.
 PR 25-SEP-2000; 2000US-235134P.
 PR 25-SEP-2000; 2000US-235280P.
 PR 25-SEP-2000; 2000US-235637P.
 PR 26-SEP-2000; 2000US-235638P.
 PR 26-SEP-2000; 2000US-235711P.
 PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P.
 PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P.
 PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P.
 PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P.
 PR 28-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236842P.
 PR 29-SEP-2000; 2000US-236891P.
 PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237173P.
 PR 02-OCT-2000; 2000US-237278P.
 PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P.
 PR 02-OCT-2000; 2000US-237316P.
 PR 03-OCT-2000; 2000US-237425P.
 PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237604P.
 PR 03-OCT-2000; 2000US-237606P.
 PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244867P.
 PR 01-NOV-2000; 2000US-245084P.

(AVAL-) AVALON PHARM.

XX Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;
 XX WPI: 2002-188264/24.

PT Screening for anti-neoplastic agent involves exposing cells to a
 chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set

XX Claim 1; SEQ ID 4022; 44pp; English.

XX The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer.
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.

XX Sequence 327 BP; 98 A; 71 C; 74 G; 84 T; 0 other;

Query Match

100.0%; Score 327; DB 24; Length 327;

Best Local Similarity 100.0%; Pred. No. 1.2e-81;
 Matches 327; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TTTTGTGTTTAAACACTTATTTTAAAGAGTACATTTTAACTCCAGTACATT 60
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DB 1 TTTTGTGTTTAAACACTTATTTTAAAGAGTACATTTTAACTCCAGTACATT 60
 OY 61 TTCAACCCATCATTTTATTTTATATCAAGTAAAGGGGGGATGCAACACCCCCAGGT 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 61 TTCAACCCATCATTTTATTTTATATCAAGTAAAGGGGGGATGCAACACCCCCAGGT 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 OY 121 CAGAACGAGGAGTCTGCTGGGCTGTCCTGACCAAGGCGGAAGGGCGACAGAGC 180
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 121 CAGAACGAGGAGTCTGCTGGGCTGTCCTGACCAAGGCGGAAGGGCGACAGAGC 180
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 OY 181 CCGAAGCAGAGTACCGCATCAGCTGGAGGGGAGGAGGAGGAGGAGGAGGAGGAGG 240
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 181 CCGAAGCAGAGTACCGCATCAGCTGGAGGGGAGGAGGAGGAGGAGGAGGAGGAGG 240
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 OY 241 TTCAATTTATCAAAAAAGGAAAAACCAATTTTTCGACCAAGATCCATTCTTCACAGCA 300
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 241 TTCAATTTATCAAAAAAGGAAAAACCAATTTTTCGACCAAGATCCATTCTTCACAGCA 300
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 OY 301 GGGGTCAAGAGAGCAGACGACCGAGT 327
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 301 GGGGTCAAGAGAGCAGACGACCGAGT 327

us-09-954-

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Query Match      100.0%   Score 327   DR14:   length 327:
BASE COUNT
Origin
98 a      71 c      74 g      84 t
Seq primer: Promega -21m13
High quality sequence stop: 305.
Location/Qualifiers
1. 327
/organism="Homo sapiens"
/db_xref="GDB:424323"
/db_xref="taxon:9606"
/clone="IMAGE:51513"
/clone_lib="Soares Infant brain INIB"
/sex="female"
/dev_stage="73 days post natal"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Whole brain; Vector: Lactimid BA; Site:1: Not
I; Site:2: Hind III; 1st strand cDNA was primed with a Not
I - oligo(dT) primer 15',
AAGCTGGAAGAATCGCGCGCGACGAAATTTTTTTTTTTTTTTT 3'};
double-stranded cDNA was ligated to Hind III adaptors
(Pharmacia), digested with Not I and directionally cloned
into the Not I and Hind III sites of the Lactimid BA vector.
Library went through one round of normalization. Library
constructed by Bento Soares and M.Fatima Bonaldo."

```

RESULT 6
LOCUS
DEFINITION EST379537 MAGE resequences, MAGJ Homo sapiens CDNA, EST 01-JUN-2000
ACCESSION AM967462
VERSION AM967462
KEYWORDS EST
SOURCE human
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 591)
AUTHORS Hegde, P., Qi, R., Abernathy, K., Dharp, S., Gaspard, R., Gay, C., Holt
Quackenbush, J.
TITLE Assessment of gene expression patterns in a model of colon tumor
JOURNAL Unpublished (2000)
COMMENT Contact: John Quackenbush
The Institute for Genomic Research
7912 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fax: 301 838 0208
Email: johnq@tigr.org
Plate: 241
Seq primer: Forward
FEATURES
LOCATION/Qualifiers
1.591
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGJ"
/note="Vector: pBluescriptSKM"
BASE COUNT
204 a 95 c 96 g 196 t

Query Match
Best Local Similarity 100.0%; Score 376; DB 10; Length 591;
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 AACATTAAGATTCTTATTAACAACCATGCAATTTATATATATTTCTTACCACTTAAGGAATAGAT 61
DB 1 AACATTAAGATTCTTATTAACAACCATGCAATTTATATATATTTCTTACCACTTAAGGAATAGAT 60
QY 62 ATGAACAATCTTGGAGTAAAGAGGCAACCTTGGCTTCAAGTTTGTAGGAGTAAAGAGTCA 121
DB 61 ATGAACAATCTTGGAGTAAAGAGGCAACCTTGGCTTCAAGTTTGTAGGAGTAAAGAGTCA 120
QY 122 TCAAGCAGAAACCTGTAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGA 181
DB 121 TCAAGCAGAAACCTGTAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGAAGAGTGA 180
QY 182 TTTCTTCCAAATGAATAAAGTCAATGTGCGCAATTTATCTTTGACACACTTATTAATAAATGTTT 241
DB 181 TTTCTTCCAAATGAATAAAGTCAATGTGCGCAATTTATCTTTGACACACTTATTAATAAATGTTT 240
QY 242 ATAAAAAGCATTTTGGGCGCATTTGATTTCTCAGACAGTTGGCTGAATATATTTGGCAATTCAGATT 301
DB 241 ATAAAAAGCATTTTGGGCGCATTTGATTTCTCAGACAGTTGGCTGAATATATTTGGCAATTCAGATT 300
QY 302 AAAAAAATATCTTAATCCCTATTAACAACATCCCAAAAAATTCAGATTCTTAATTAAGTTAAGTTA 361
DB 301 AAAAAAATATCTTAATCCCTATTAACAACATCCCAAAAAATTCAGATTCTTAATTAAGTTAAGTTA 360
QY 362 GGCCCTGGGCATATAG 377
DB 361 GGCCCTGGGCATATAG 376

Seq ID No: 1621

ALIGNMENTS

for SEQ ID NO 1621

```
RESULT 1
ABL65308
ID ABL65308 standard; DNM: 377 BP.
XX
XX
AC ABL65308;
XX
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:3645.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; wilm's tumour; adenocarcinoma;
KW gene; ds;
XX
OS Homo sapiens.
XX
XX
PN M0200194629-A2.
XX
XX
PD 13-DEC-2001.
XX
XX
PF 30-MAY-2001; 2001MO-US10838.
XX
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.
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ABL 65308

- cont -

PR 25-SEP-2000: 2000US-234923P.
 PR 25-SEP-2000: 2000US-234924P.
 PR 25-SEP-2000: 2000US-235077P.
 PR 25-SEP-2000: 2000US-235082P.
 PR 25-SEP-2000: 2000US-235134P.
 PR 25-SEP-2000: 2000US-235280P.
 PR 26-SEP-2000: 2000US-235637P.
 PR 26-SEP-2000: 2000US-235638P.
 PR 27-SEP-2000: 2000US-235711P.
 PR 27-SEP-2000: 2000US-235720P.
 PR 27-SEP-2000: 2000US-235840P.
 PR 27-SEP-2000: 2000US-235863P.
 PR 28-SEP-2000: 2000US-236028P.
 PR 28-SEP-2000: 2000US-236032P.
 PR 28-SEP-2000: 2000US-236033P.
 PR 28-SEP-2000: 2000US-236034P.
 PR 28-SEP-2000: 2000US-236109P.
 PR 28-SEP-2000: 2000US-236811P.
 PR 29-SEP-2000: 2000US-236842P.
 PR 29-SEP-2000: 2000US-236891P.
 PR 02-OCT-2000: 2000US-237172P.
 PR 02-OCT-2000: 2000US-237173P.
 PR 02-OCT-2000: 2000US-237278P.
 PR 02-OCT-2000: 2000US-237294P.
 PR 02-OCT-2000: 2000US-237295P.
 PR 02-OCT-2000: 2000US-237316P.
 PR 03-OCT-2000: 2000US-237425P.
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 PR 03-OCT-2000: 2000US-237604P.
 PR 03-OCT-2000: 2000US-237606P.
 PR 03-OCT-2000: 2000US-237608P.
 PR 01-NOV-2000: 2000US-244867P.
 PR 01-NOV-2000: 2000US-245084P.

(AVAL-) AVALON PHARM.

PI Young PE, Augustus M, Carter KC, Edner R, Endress G, Horrigan S;
 PI Soppel DR, Weaver Z;

DR WPI; 2002-188264/24.

PT Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set -

PS Claim 1: SEQ ID 3645; 44pp; English.

CC The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.

XX Sequence 377 BP; 143 A; 61 C; 56 G; 117 T; 0 other;

Query Match 100.0%; Score 377; DB 24; Length 377;

Best Local Similarity 100.0%; Pred. No. 6.9e-80;

Matches 377; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 AACATTAGATTATTTACAAACCATGATATATTTCTTACACTTAAGAAATAGA 60
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Db 1 AACATTAGATTATTTACAAACCATGATATATTTCTTACACTTAAGAAATAGA 60
 Qy 61 TATGAACAATCTTGAGTAAATAGAAAGCACTTCTCAGTTGTACCAAGTCA 120
 |||
 Db 61 TATGAACAATCTTGAGTAAATAGAAAGCACTTCTCAGTTGTACCAAGTCA 120
 Qy 121 ATCAAGCAGAAACCTGAGAACCTGTTTAAAGATGAGATCTTATACCTGGCAGGCA 180
 Db 121 ATCAAGCAGAAACCTGAGAACCTGTTTAAAGATGAGATCTTATACCTGGCAGGCA 180
 Qy 181 TTTCTTCCATGAAAAAATAAGTCAATGTCATATCTTACACTATAAATGTT 240
 |||
 Db 181 TTTCTTCCATGAAAAAATAAGTCAATGTCATATCTTACACTATAAATGTT 240
 Qy 241 TATAAAGCATTTAGGCCATTTGATCTCAGTTGCTGAATATGGAATCAGTAGAT 300
 |||
 Db 241 TATAAAGCATTTAGGCCATTTGATCTCAGTTGCTGAATATGGAATCAGTAGAT 300
 Qy 301 TAAAAAAATCTATATCCCTATACACATCCCAAAATTCAGATTAATTAGTGAAGTT 360
 |||
 Db 301 TAAAAAAATCTATATCCCTATACACATCCCAAAATTCAGATTAATTAGTGAAGTT 360
 Qy 361 AGGCCCTGGGCAATATAG 377
 |||
 Db 361 AGGCCCTGGGCAATATAG 377

ALIGNMENTS

RESULT 1
ABL64298
ID ABL64298 standard; DNA; 418 BP. *ES - 522 ID N. 1612*
XX
AC ABL64298;
XX
DT 15-MAY-2002 (first entry)
XX
DE Stomach cancer related gene sequence SEQ ID NO:2635.
XX
KW Human; Cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN W0200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001MO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

us-09-954

```

FEATURES
source
High quality sequence stop: 362.
Location/Qualifiers
1..418
/organism="Homo sapiens"
/db_xref="GDB:1239454"
/db_xref="taxon:9606"
/clone="IMAGE:294533"
/clone_lib="Soares fetal liver spleen INFLS"
/sex="male"
/dev_stage="20 week post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: p7T3D (Pharmacia)
with a modified polylinker; Site.1: Pac I - oligo(dT) primer
1st strand cDNA was primed with a Pac I - oligo(dT) primer
[5' AACGGAGAGATTAATTAAAGACTCTTTTGTTTTTTTTTTTT 3'] ,
double-stranded cDNA was ligated to Eco RI adaptors
(Pharmacia), digested with Pac I and cloned into the Pac I
and Eco RI sites of the modified p7T3 vector. Library
went through one round of normalization. Library
constructed by Bento Soares and M.Fátima Bonaldo."
BASE COUNT
159 a 74 c 89 g 95 t 1 others
ORIGIN

```

ALIGNMENTS

RESULT 1

ABL65990

ID ABL65990 standard; DNA; 436 BP.

for SEQ ID NO: 1360

XX

AC ABL65990;

XX

DT 15-MAY-2002 (first entry)

DE

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DE

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us-09-954-

High quality sequence stop: 185.
Location/Qualifiers
1. 436
/organism="Homo sapiens"
/db_xref="GDB:5975360"
/db_xref="taxon:9606"
/clone="IMAGE:752528"
/clone_1db="Scars_NhHMPU_S1"
/tissue_type="Pooled human melanocyte, fetal heart, and pregnant uterus"
/lab_host="DH10B"
/note="Organ: mixed (see below); Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three nonmutated libraries (melanocyte 2NBH4, pregnant uterus NBH191, and fetal heart NBH119W) were mixed, and ss circles were made in vitro. Following NBP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of T.M.A.G.E. clones 260232-265223, 340488-345479, and 484488-489479."

ALIGNMENTS

RESULT 1

AA620885

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

AA620885 383 bp mRNA linear EST 02-MAR-1998

af95g06.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1055578

3' mRNA sequence.

AA620885

EST.

human.

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.

1 (bases 1 to 383)

Hiller, L., Allen, M., Bowles, L., Dubuque, T., Geisel, G., Jost, S.,

Kizman, D., Kucaba, T., Lacy, M., Le, N., Lennon, G., Marra, M., Martin

White, Y., Wylie, T., Waterston, R., and Wilson, R.

J., Moore, B., Schellenberg, K., Steptoe, M., Tan, F., Theising, B.,

Washington University School of Medicine

Contact: Wilson RK

4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108

Tel: 314 286 1800

Fax: 314 286 1810

Email: est@watson.wustl.edu

This clone is available royalty-free through INL; contact the

IMAGE Consortium (info@image.llnl.gov) for further information.

Insert length: 1052 Std Error: 0.00

Seq primer: -40m13 fwd. ET from Amersham

4- SEQ 16 NO: 1340

for 500 ID 20:1340

BASE COUNT	ORIGIN
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Tue May 27 08:34:32 2003

-456-60-us

P1 Young PE, Augustus M, Carter KC, Edner R, Endress G, Horrigan S,
P1 Soppet DR, Weaver Z,
XX
DR WPI: 2002-188264/24.
XX

XX The present invention describes a method (M1) for screening for an
CC anti-neoplastic agent. The method involves exposing cells to a chemical
CC agent to be tested for anti-neoplastic activity, determining a change in
CC compression of at least one gene (I) of a signature gene set, where (I)
CC comprises a sequence (S) selected from 8447 sequences (given in AB161664
CC to AB170110), or is at least 95% identical to (S), where a change in
CC expression is indicative of anti-neoplastic activity. (I) has cytosolic
CC activity and can be used in gene therapy. M1 can be used for screening
CC an anti-neoplastic agent, and can be used for producing a product which
CC is the data collected with respect to the anti-neoplastic agent as a
CC result of M1, and the data is sufficient to convey the chemical
CC structure and/or properties of the agent. M1 can be used in the
CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal
CC cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC carcinoma, papillary carcinoma and Wilms' tumour.
XX

Sequence 383 BP; 153 A; 60 C; 47 G; 123 T; 0 other;
Query Match 100.0%; Score 383; DB 24;
Best Local Similarity 100.0%; Pred. 5.8e-66;
Matches 383; Conserved 4

us-09-954-45

Db 1 TTGAACTATAAATTCCTTTTAAACCTAATCCAGCCAGTATTGACATGTTGGCTATA 60

QY 61 TTAATAACAGACGCTTTAAAAAATTACAGCAAGATTGAGAGCGAGTACTAATTAAGT 120

Db 61 TTAATAACAGACGCTTTAAAAAATTACAGCAAGATTGAGAGCGAGTACTAATTAAGT 120

QY 121 CACTAAGTTTATTTTATATCTCTCAAGTCATTTCAATCATGTAAAGGTAAACAAT 180

Db 121 CACTAAGTTTATTTTATATCTCTCAAGTCATTTCAATCATGTAAAGGTAAACAAT 180

QY 181 TTTTACGCACTTTGAGATTAAGTTAACTTTTGAAGAATTAAGATTTCTAGTGTCTCA 240

Db 181 TTTTACGCACTTTGAGATTAAGTTAACTTTTGAAGAATTAAGATTTCTAGTGTCTCA 240

QY 241 TTGAATTTTATTAAGAAGGTTTAAACATTAAAGTTTCCAGAAATTAACAGATAAGAAA 300

Db 241 TTGAATTTTATTAAGAAGGTTTAAACATTAAAGTTTCCAGAAATTAACAGATAAGAAA 300

QY 301 TATGAAATTAACGCGAAATTAATAATTACCCAGCCATCGAAAAATTCATCATCTCT 360

Db 301 TATGAAATTAACGCGAAATTAATAATTACCCAGCCATCGAAAAATTCATCATCTCT 360

QY 361 TTCATTGTGCCCCAATGCGCTTTC 383

Db 361 TTCATTGTGCCCCAATGCGCTTTC 383

N52026 486 bp mRNA linear EST 15-FEB-1996
yz08e07.s1 Soares-multiple.sclerosis.2NBHSP Homo sapiens cDNA
clone IMAGE:282468 3', mRNA sequence.

N52026
EST. N52026.1 GI:1193192

human.
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.

1 (bases 1 to 486)
Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman
, M., Holtman, M., Kucaba, T., Le, M., Lennon, G., Maira, M., Parsons, J.,
Rifkin, L., Rohlfing, T., Soares, M., Tan, F., Trevisakis, E., Waterston
, R., Williamson, A., Wohlmann, P. and Wilson, R.
The WashU-Merck EST Project
Unpublished (1995)
Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: estewatson.wustl.edu

This clone is available royalty-free through LNL; contact the
IMAGE Consortium (infoimage.lnl.gov) for further information.
Seq primer: m13 -40 forward
High quality sequence stop: 194.

us-09-954

Location/Qualifiers
1. .486

157 a	85 c	94 g	147 t	3 others
-------	------	------	-------	----------

99.48;	Score 483;	DB 14;	Length 486;
100.08.	Prod No 348170		

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Percent local similarity 100.0%; Pred. NO. 2.4e-118;
Matches 486; Conservative 0; Mismatches 0; Indels 0; Gaps 0

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Qy	1	ACCC	TAGATAGATATGATTTATTTACCAAGAGTATCCGAAACATATATTTTACAA	60
Dd	1	ACCC	TAGATAGATATGATTTATTTACCAAGAGTATCCGAAACATATATTTTACAA	60
Qy	61	AATG	AAATTTTTTTTCCAAACAAGCTGAATTTTACGACTGAAATAGAT	12
Dd	61	AATG	AAATTTTTTTTCCAAACAAGCTGATAGTGAATTTTTAGACCTTGAATAGAT	12
Qy	121	TCTC	ATACCACTAGTATTTGCTTACAGCAAAAGTGTCTGTCTGTTAGAGACATGC	180
Dd	121	TCTC	ATACCAACACAGTATTTGCTTACAGCAAAAGTGTCTGTCTGTTAGAGACATGC	180
Qy	181	CTGC	CACTCGAGTTAACTGTTTCTATACGTACAGTGAATAATACATGTGA	240
Dd	181	CTGC	CACTCGGAGTTAACTGTTTCTATACGTACAGTGAATAATACATGTGA	240
Qy	241	TATT	CACAGATTAAGCACTACATTACTATTTCTCGTAGAAGGATTTAGACAGACTA	300
Dd	241	TATT	CACAAATTAACACACTACATTACTATTTCTCGTAGAAGGATTTAATCAGACTA	300
Qy	301	CAGT	ATATGCCATAAAACACTGGTTTATGGATTTTCCATAATTCTACAGTGGGTA	360
Dd	301	CAGT	ATATGCCATAAAAACACTGGTTATTTGGATTTTCCATAATTCTACAGTGGGTA	360
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Dd	361	CTAA	TTATCCACAAGGTATACNGACTTAAGAGCCATCCTCAATGTAAGGCTCGTA	420
Qy	421	AGTG	ACCGGTTANCGAGCTTAAGANGAAGAAAAATGACATTTTGGGGTCCCGACTT	480
Dd	421	AGTG	ACCGGTTANCGAGCTTTAAAGANGAAGAAAAATGACATTTTGGGGTCCCGACTT	480
Qy	481	TCAG	TGAGT 486	
Dd	481	TCAG	TGAGT 486	

ALIGNMENTS

for SETA ID NO: 1483

RESULT 1

ABL66173

ID ABL66173 standard; DNA; 486 BP.

AC ABL66173;

DT 15-MAY-2002 (first entry)

DE Lung cancer related gene sequence SEQ ID NO:4510.

KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;

KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;

KW cytosolic; gene therapy; antineoplastic; Wilms tumour; adenocarcinoma;

KW gene; ds.

XX Homo sapiens.

PN WO200194629-A2.

PD 13-DEC-2001.

PF 30-MAY-2001; 2001WO-US10838.

XX.

PR 05-JUN-2000; 2000US-209473P.

PR 05-JUN-2000; 2000US-209531P.

PR 18-SEP-2000; 2000US-233133P.

PR 18-SEP-2000; 2000US-233617P.

PR 20-SEP-2000; 2000US-234009P.

PR 20-SEP-2000; 2000US-234034P.

PR 22-SEP-2000; 2000US-234509P.

PR 22-SEP-2000; 2000US-234567P.

PR	25-SEP-2000;	2000US-234923P
PR	25-SEP-2000;	2000US-234924P
PR	25-SEP-2000;	2000US-235077P
PR	25-SEP-2000;	2000US-235082P
PR	25-SEP-2000;	2000US-235134P
PR	25-SEP-2000;	2000US-235280P
PR	26-SEP-2000;	2000US-235637P
PR	26-SEP-2000;	2000US-235638P
PR	27-SEP-2000;	2000US-235711P
PR	27-SEP-2000;	2000US-235720P
PR	27-SEP-2000;	2000US-235840P
PR	27-SEP-2000;	2000US-235863P
PR	28-SEP-2000;	2000US-236028P
PR	28-SEP-2000;	2000US-236032P
PR	28-SEP-2000;	2000US-236033P
PR	28-SEP-2000;	2000US-236034P
PR	28-SEP-2000;	2000US-236109P
PR	28-SEP-2000;	2000US-236111P
PR	29-SEP-2000;	2000US-236842P
PR	29-SEP-2000;	2000US-236891P
PR	02-OCT-2000;	2000US-237172P
PR	02-OCT-2000;	2000US-237173P
PR	02-OCT-2000;	2000US-237278P
PR	02-OCT-2000;	2000US-237294P
PR	02-OCT-2000;	2000US-237295P
PR	02-OCT-2000;	2000US-237316P
PR	03-OCT-2000;	2000US-237425P
PR	03-OCT-2000;	2000US-237598P
PR	03-OCT-2000;	2000US-237604P
PR	03-OCT-2000;	2000US-237606P
PR	01-NOV-2000;	2000US-237608P
PR	01-NOV-2000;	2000US-244867P
PR	01-NOV-2000;	2000US-245084P

WPI: 2002-188264/24

Claim 1: SEQ ID 4510, 44pp; English.

CC The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL616b64
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.
 CC
 XX Sequence 486 BP; 157 A; 85 C; 94 G; 147 T; 3 other;

Query Match	99.48;	Score 483;	DB 24;	Length 486;
Best Local Similarity	100.08;	Pred. No. 7.6e-124;		
Matches 486; Conservative	0;	Mismatches 0;	Indels 0;	Gaps 0

QY 1 ACCCTGAGATGAGATACATTATTATTCGACAGAGCTAATCAGAAACATATATTTTTCAAA 66
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Db	1	ACCCTGAGATGAGATGACATTATTATGACAAAGGTAATCAGAAACAATATTTTTCACA	60
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Qy	121	TCTCATACCACTAGTAGTATGTCGTACAGCAAAAGTGTCTGTGTGTATGTGGAGATGC	180
Db	121	TCTCATACCACTAGTAGTATGTCGTACAGCAAAAGTGTCTGTGTGTATGTGGAGATGC	180
Qy	181	CTGCACCTTGGGAGTTAACTGTGTCTTCTTAATCTGACAGTGAATAAATAATCATGGTAA	240
Db	181	CTGCACCTTGGGAGTTAACTGTGTCTTCTTAATCTGACAGTGAATAAATAATCATGGTAA	240
Qy	241	TATTCACAGAAATAGCACTACATTAATTAATTCCTGTAAAGGCATTTAGACAGGACTA	300
Db	241	TATTCACAGAAATAGCACTACATTAATTAATTCCTGTAAAGGCATTTAGACAGGACTA	300
Qy	301	CAGTATATGCCATAAAAAACACTTGTTATTTGATTTTCCCTAATTCCTACAGTGTGGTA	360
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Qy	361	CTAATATTCACCAAGGTATACGSGACTTAAGGCGATCCTCAATGCTAAGGCTGGTA	420
Db	361	CTAATATTCACCAAGGTATACGSGACTTAAGGCGATCCTCAATGCTAAGGCTGGTA	420
Qy	421	AGTGAACCGGTTANGCAGCCTTAANGANGGAAAAAGTACATTTTTTGGGGTCCCGCACTT	480
Db	421	AGTGAACCGGTTANGCAGCCTTAANGANGGAAAAAGTACATTTTTTGGGGTCCCGCACTT	480
Qy	481	TCAGTG 486	
Db	481	TCAGTG 486	

Db 421 AGTGACCCGTTANGCAGCCTTAAGANGGA AAAAGTGACATTTTGGGGTTCCCGACTT 480

QY 401 111111

Db 481 TCACTG 486

ALIGNMENTS

for SEA ID NO 1544

RESULT 1
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 LOCUS yx09a02.s1 Soares melanocyte 2NDbm Homo sapiens cDNA clone
 DEFINITION IMAGE:261194 3', mRNA sequence.
 H98215
 ACCESSION H98215
 VERSION H98215
 KEYWORDS EST
 H98215.1 GI:1119100
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 383)
 Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman
 'M., Hultman, M., Kucaba, T., Le, M., Lennon, G., Marra, M., Parsons, J.,
 Rifkin, L., Rohlfing, T., Soares, M., Tan, F., Trevaskis, E., Waterston
 'R., Williamson, A., Wohldmann, P. and Wilson, R.
 The WashU-Merck EST Project
 Unpublished (1995)
 TITLE Contact: Wilson RK
 JOURNAL Washington University School of Medicine
 COMMENT 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@watson.wustl.edu
 High quality sequence stops: 109
 Source: IMAGE Consortium, LLNL
 This clone is available royalty-free through LLNL; contact the
 IMAGE Consortium (info@image.llnl.gov) for further information.

Insert Length: 1053 Std Error: 0.00
Seq primer: m13 -40 forward
High quality sequence stop: 109.
Location/Qualifiers
1. 383

FEATURES

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/db_xref="taxon:9606"
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/clone.lib="Soares melanocyte 2NBHM"
/sex="Male"
/tissue="Type="melanocyte"
/lab_host="DH10B (ampicillin resistant)"
/note="Vector: pT7T3D (Pharmacia) with a modified
polylinker. Site 1: Not I; Site 2: Eco RI; 1st strand cDNA
was primed with a Not I - oligo(dT) primer (5'
TGTTCACATCTGAAGTGGAGCGCGCCAGTCTTTTCTTTTCTTTT
3'),
double-stranded cDNA was size selected, ligated to Eco RI
adapters (Pharmacia), digested with Not I and cloned into
the Not I and Eco RI sites of a modified pT7T3 vector
(Pharmacia). Library constructed by Bento Soares and
M. Fatima Bonaldo. RNA from normal foreskin melanocytes
(FS374) was kindly provided by Dr. Anthony P. Albino."
BASE COUNT 139 a 65 c 80 g 96 t 3 others
ORIGIN

Query Match 99.2% Score 380; DB 14; Length 383;
Best Local Similarity 100.0%; Pred. No. 9.2e-92;
Matches 383; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CACAGAACAAATCTTTTATTTGATGAGAAATAGCCCTGTGCTGCTCAAGTG 60
1 CACAGAACAAATCTTTTATTTGATGAGAAATAGCCCTGTGCTGCTCAAGTG 60
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61 CAACATACGAATATTTGATTAAGAAAGAGGAAAGGGAAGGAAGCAACCTCTT 120
121 GAGGTCCAAATCTTGCACAAACAAATGTTTCTTCAAGCAAGGCAATTTT 180
121 GAGGTCCAAATCTTGCACAAACAAATGTTTCTTCAAGCAAGGCAATTTT 180
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241 AAAGCACTCCACGATCTCTGTAGCTGACAGACAGAGAAAGAACTAAATG 300
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301 CTTTGGATTTTCAAGATTTTGGCACTCTTGTGATTAATCTTTTACAGTCCATTA 360
361 GGGGAATTAACGACATTAATTT 383
361 GGGGAATTAACGACATTAATTT 383

RESULT 2
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LOCUS BIR20748 603034344F1 NIH_MGC_115 Homo sapiens cDNA clone IMAGE:517586 5',
DEFINITION mRNA sequence.
ACCESSION BIR20748
VERSION BIR20748.1 GI:15932298
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 463)
AUTHORS NIH-MGC <http://mgc.ncl.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
CONTACT: Robert Strausberg, Ph.D.
Email: cgapbs-rt@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
<http://image.llnl.gov>
Plate: LLAM1437 row: 9 column: 11
High quality sequence stop: 463.
Location/Qualifiers
1. 463

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/db_xref="taxon:9606"
/clone="IMAGE:517586"
/clone.lib="NIH_MGC_115"
/lab_host="DH10B"
/note="Organ: pooled brain, lung, testis; Vector:
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source anonymous pool of 6 male brains, age 69. Library is
male lung, age 27; and 1 male testis, age 69. Library is
oligo-dT primed and directionally cloned (EcoRV site is
destroyed upon cloning). Average insert size 1.8 kb,
insert size range 1-3 kb. Library is normalized and
enriched for full-length clones and was constructed and
Gruber (Invitrogen). Research Genetics tracking code
021. Note: this is a NIH-MGC Library."

BASE COUNT 129 a 93 c 78 g 163 t
ORIGIN

Query Match 86.4% Score 330.8; DB 13; Length 463;
Best Local Similarity 97.9%; Pred. No. 1.6e-78;
Matches 376; Conservative 0; Mismatches 4; Indels 4; Gaps 4;

1 CACAGAACAAATCTTTTATTTGATGAGAAATAGCCCTGTGCTGCTCAAGTG 60
428 CACAGAACAAATCTTTTATTTGATGAGAAATAGCCCTGTGCTGCTCAAGTG 369
61 CAACATACGAATATTTGATTAAGAAAGAGGAAAGGGAAGGAAGCAACCTCTT 120
368 CAACATACGAATATTTGATTAAGAAAGAGGAAAGGGAAGGAAGCAACCTCTT 120
121 GAGGTCCAAATCTTGCACAAACAAATGTTTCTTCAAGCAAGGCAATTTT 180
309 GAGGTCCAAATCTTGCACAAACAAATGTTTCTTCAAGCAAGGCAATTTT 180
181 GCAATATACGATGCAAAACAGGCACTGTGCTTAAAGAAATCCCTATTAATACAGA 240
250 GCAATATACGATGCAAAACAGGCACTGTGCTTAAAGAAATCCCTATTAATACAGA 191
241 AAAGCACTCCACGATCTCTGTAGCTGACAGACAGAGAAAGAACTAAATG 300
190 AAAGCACTCCACGATCTCTGTAGCTGACAGACAGAGAAAGAACTAAATG 300
301 CTTTGGATTTTCAAGATTTTGGCACTCTTGTGATTAATCTTTTACAGTCCATTA 360
360 AGGGGAATTAACGACATTAATTT 383
70 A-GAGAAATTAACGACATTAATTT 48

RESULT 3
BIR15336 465 bp mRNA 1 linear EST 19-SEP-2001
LOCUS BIR15336 603034344F1 NIH_MGC_115 Homo sapiens cDNA 5', mRNA sequence.
DEFINITION mRNA sequence.
ACCESSION BIR15336
VERSION BIR15336.1 GI:15931031
KEYWORDS EST.

fn seed no: 1549

us-09-954-

CC is the data collected with respect to the anti-neoplastic agent as a
CC result of MI, and the data is sufficient to convey the chemical
CC structure and/or properties of the agent. MI can be used in the
CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal
CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
XX carcinoma, papillary carcinoma and Wilms' tumour.
SQ Sequence 383 BP; 139 A; 65 C; 90 G; 7 T.

Query March

Best Local Similarity	95.2%;	Score 380;	DB 24;	Length 383;
Matches 383;	Conservative	100.0%;	Pred. No. 1.8e-100;	

```

    ...; Mismatches 0;

```

xy 1 CACAGGACAATCTTTATTGTACATTGGC

db
1 CACAGGACATTCCTTATTCTGCACCTCCCTCCTGGGTTCAAGGTG 60

QY 61 CACATACAGATTATTCCTTCTCAAGGTG 60

Db 61 CAACATGCGGGAAGGGAANGGAAACCTCTTT 12

.....GGAACGGGGAAGGGAANGCAACCTCTTT 12

|||||CTCACCAGGANGGGATTTCCTAACAGATTTGTAAGAATCAAAACACAC

CTGGTAAAGATTTCCTACCGCACCAGGTT

101 GAAATACCATGCAAAACAGCGCAGCTGGTGTCCCTTAACAATAA

181 GCAATACCATGCAAAACAGGCGTGGTCTCCCTT

AAAGACACTCCAAGCATTCCTCCGCGC-----GGTATTAACAAGA

241

240

241 AAAGACACTTCTAAGCAATG 300

301 CATTTCCTTTT
CAGGCGACGAGAAAGAACAATAATG 300

301GATTTTACAGTCCATTAA 360

.....GGAATTTGGCACTCTTGATTTACATTTTTCACAGTCCATTAAATTTT

|||||GACATATAT 383

551 GGGGATAACTGACATATATT 383

SEQUENCE

for SEQ ID NO: 1549

RESULT 1
 ABL62348
 ID ABL62348 standard; DNA: 383 BP.
 XX ABL62348;
 AC
 XX
 DT 15-MAY-2002 (first entry)
 XX
 DE Colon adenocarcinoma related gene sequence SEQ ID NO:685.
 XX
 KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
 KW cytosolic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
 KW gene; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200194629-A2.
 XX
 XX 13-DEC-2001.
 PD
 XX
 PF 30-MAY-2001; 2001WO-US10838.
 XX
 PR 05-JUN-2000; 2000US-209473P.
 PR 05-JUN-2000; 2000US-209531P.
 PR 18-SEP-2000; 2000US-233133P.
 PR 18-SEP-2000; 2000US-233617P.
 PR 20-SEP-2000; 2000US-234009P.
 PR 20-SEP-2000; 2000US-234034P.
 PR 20-SEP-2000; 2000US-234052P.
 PR 22-SEP-2000; 2000US-234509P.
 PR 22-SEP-2000; 2000US-234567P.
 PR

PR 25-SEP-2000; 2000US-234923P.
 PR 25-SEP-2000; 2000US-234924P.
 PR 25-SEP-2000; 2000US-235077P.
 PR 25-SEP-2000; 2000US-235082P.
 PR 25-SEP-2000; 2000US-235134P.
 PR 25-SEP-2000; 2000US-235280P.
 PR 25-SEP-2000; 2000US-235637P.
 PR 26-SEP-2000; 2000US-235638P.
 PR 27-SEP-2000; 2000US-235711P.
 PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P.
 PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P.
 PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P.
 PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P.
 PR 28-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236842P.
 PR 29-SEP-2000; 2000US-236891P.
 PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237173P.
 PR 02-OCT-2000; 2000US-237278P.
 PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P.
 PR 02-OCT-2000; 2000US-237316P.
 PR 03-OCT-2000; 2000US-237425P.
 PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237604P.
 PR 03-OCT-2000; 2000US-237606P.
 PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244867P.
 PR 01-NOV-2000; 2000US-245084P.

(AVAL-) AVALON PHARM.

PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;

DR MPI: 2002-188264/24.

PT Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set

PS Claim 1; SEQ ID 685; 44pp; English.

CC The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumor.

SO Sequence 383 BP; 139 A; 65 C; 80 G; 96 T; 3 other;

Query Match 99.2%; Score 380; DB 24; Length 383;

Best Local Similarity 100.0%; Pred. No. 1.8e-100;
 Matches 383; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CACAGGAAACAATTCCTTTATTTGATGAGAAATACCCCTGTGCTGCTCAAGCTG 60
 |||

Db 1 CACAGGAAACAATTCCTTTATTTGATGAGAAATACCCCTGTGCTGCTCAAGCTG 60
 QY 61 CACATACAGAAATATTTGATTTAGAAAAAGAGGAGGAGGAGGAAACCTCTTT 120
 |||
 Db 61 CACATACAGAAATATTTGATTTAGAAAAAGAGGAGGAGGAGGAAACCTCTTT 120
 QY 121 GAGGTCCAAAGTTCACCAAAAAATGTTAAAGATTTCCCTACGCAAGANGCATTTT 180
 |||
 Db 121 GAGGTCCAAAGTTCACCAAAAAATGTTAAAGATTTCCCTACGCAAGANGCATTTT 180
 QY 181 GCAATACCATGCAAAAACAGCAGCTGTGCTGCTTAAAGAAATCCCTATTAATACAGA 240
 |||
 Db 181 GCAATACCATGCAAAAACAGCAGCTGTGCTGCTTAAAGAAATCCCTATTAATACAGA 240
 QY 241 AAGACACTCCAGCAATTCCTGTACGTGAGCTCAGACGACAGAGAAAAAAGAACTAAATG 300
 |||
 Db 241 AAGACACTCCAGCAATTCCTGTACGTGAGCTCAGACGACAGAGAAAAAAGAACTAAATG 300
 QY 301 CCTTTGATTTCAAGATTTTGGCAGCTCTGTGATTTATTTTACAGTCCATTTAA 360
 |||
 Db 301 CCTTTGATTTCAAGATTTTGGCAGCTCTGTGATTTATTTTACAGTCCATTTAA 360
 QY 361 GGGGAATTAACCTGACATTAATTT 383
 |||
 Db 361 GGGGAATTAACCTGACATTAATTT 383

RESULT 2

ABL65156
 ID ABL65156 standard; DNA; 383 BP.

AC ABL65156;

DT 15-MAY-2002 (first entry)

XX Lung cancer related gene sequence SEQ ID NO:3493.

KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumor; cancerous;
 KW cytostatic; gene therapy; antineoplastic; Wilms' tumor; adenocarcinoma;
 KW gene; ds.

OS Homo sapiens.

PN W0200194629-A2.

XX 13-DEC-2001.

PD 30-MAY-2001; 2001WO-US10638.

XX 05-JUN-2000; 2000US-209473P.

PR 05-JUN-2000; 2000US-209531P.

PR 18-SEP-2000; 2000US-233133P.

PR 18-SEP-2000; 2000US-233617P.

PR 20-SEP-2000; 2000US-234009P.

PR 20-SEP-2000; 2000US-234034P.

PR 20-SEP-2000; 2000US-234052P.

PR 22-SEP-2000; 2000US-234509P.

PR 22-SEP-2000; 2000US-234527P.

PR 25-SEP-2000; 2000US-234923P.

PR 25-SEP-2000; 2000US-234924P.

PR 25-SEP-2000; 2000US-235077P.

PR 25-SEP-2000; 2000US-235082P.

PR 26-SEP-2000; 2000US-235134P.

PR 26-SEP-2000; 2000US-235280P.

PR 27-SEP-2000; 2000US-235637P.

PR 27-SEP-2000; 2000US-235638P.

PR 27-SEP-2000; 2000US-235711P.

PR 27-SEP-2000; 2000US-235720P.

PR 27-SEP-2000; 2000US-235840P.

PR 28-SEP-2000; 2000US-235863P.

PR 28-SEP-2000; 2000US-236028P.

PR 28-SEP-2000; 2000US-236032P.

Claim 1; SEQ ID 3493; 44pp; English.

Sequence 383 BP; 139 A; 65 C; 80 G; 96 T; 3 other;

Matches	383	Conservative	0	Mismatches	0	Indels	0	Gaps	0
---------	-----	--------------	---	------------	---	--------	---	------	---

181 GCAATACCATGCAAACAGCGCAGCTGGTGTGCCCTTAAGAGATCCCTATAAATAACAGA 240

Db 361 GGGGATAAACTGACATAATATT 383

ID ABL66239 standard; DNA; 383 BP

DT 15-MAY-2002 (first entry)

DE Lung cancer related gene sequence SEQ ID NO:4576

KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
 KW cytostatic; gene therapy; antineoplastic; Wilms' tumour; adenocarcinoma;
 KW gene; ds.

OS Homo sapiens.

PN W0200194629-A2

PD 13-DEC-2001

PF 30-MAY-2001; 2001WO-US10838

05-JUN-2000; 2000US-209473P.

PR 18-SEP-2000; 2000US-233133P.

PR 20-SEP-2000: 2000US-234009P

20-SEP-2000: 2000TS-234052P
PK 20-SEP-2000: 200005-234054Z
DR

PR 22-SEP-2000; 2000US-234309P.
PR 22-SEP-2000; 2000TS-234567P

PR 25-SEP-2000; 2000US-234923P
PP 25-SEP-2000; 2000US-234924P

PR 25-SEP-2000; 2000US-235077P
 PP 25-SEP-2000; 2000US-235082P

PR 25-SEP-2000; 2000US-235134P

PR 26-SEP-2000; 2000US-235637P

PR 27-SEP-2000; 2000US-235711P.

PR 27-SEP-2000; 2000US-235840P

PR 28-SEP-2000; 2000US-236028P

PR 28-SEP-2000; 2000US-236033P

PR 28-SEP-2000; 2000US-236109P

PR 29-SEP-2000; 2000US-236842P

PR 02-OCT-2000: 2000US-237172P

PR 02-OCT-2000: 2000US-237278P

PR 02-OCT-2000: 2000TIS-237295P

PR 02-OCT-2000; 2000US-23/316P
 DP 03-OCT-2000; 2000US-237425P

PR 03-OCT-2000; 2000DS-237598P

PR 03-OCT-2000; 2000US-237604P.
 PR 03-OCT-2000; 2000US-237606P.
 PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244867P.
 PR 01-NOV-2000; 2000US-245084P.

PA (AVAL-) AVALON PHARM.

PI Young PE, Augustus M, Carter KC, Edner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;

XX WPI: 2002-188264/24.

DR Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set -
 XX

PS Claim 1; SEQ ID 4576; 44pp; English.

XX The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.

XX Sequence 383 BP; 139 A; 65 C; 80 G; 96 T; 3 other;

Query Match 99.2%; Score 380; DB 24; Length 383;
 Best Local Similarity 100.0%; Pred No. 1.8e-100;

Matches 383; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

YY 1 CACAGGAACATCTTTTATTTGATGAGAAATAGCCCTGTGCTGTTCAAGTG 60
 DB 1 CACAGGAACATCTTTTATTTGATGAGAAATAGCCCTGTGCTGTTCAAGTG 60
 YY 61 CAACATACGAAATTTGATTAAGAAAAGAGGACGGGGAAGGAAAGAACTCTTT 120
 DB 61 CAACATACGAAATTTGATTAAGAAAAGAGGACGGGGAAGGAAAGAACTCTTT 120
 YY 121 GAGGTCCAAAGTTGNCACAAAATGTTAAAGATTCTCTACGGAAGANGCATTTT 180
 DB 121 GAGGTCCAAAGTTGNCACAAAATGTTAAAGATTCTCTACGGAAGANGCATTTT 180
 YY 121 GAGGTCCAAAGTTGNCACAAAATGTTAAAGATTCTCTACGGAAGANGCATTTT 180
 DB 121 GAGGTCCAAAGTTGNCACAAAATGTTAAAGATTCTCTACGGAAGANGCATTTT 180
 YY 181 GCAAAATACCATGCAAAAGAGGAGCTGTGCTTAAGAAATCCCTTAATATACAGA 240
 DB 181 GCAAAATACCATGCAAAAGAGGAGCTGTGCTTAAGAAATCCCTTAATATACAGA 240
 YY 241 AAAGACATCTCAAGCATCTCTGACGTGACAGACAGAGAAAGAACTAAATG 300
 DB 241 AAAGACATCTCAAGCATCTCTGACGTGACAGACAGAGAAAGAACTAAATG 300
 YY 301 CCTTTGGATTTCAAGATATTTGGCACTCTTGATTAATTTTACAGTCCATTA 360
 DB 301 CCTTTGGATTTCAAGATATTTGGCACTCTTGATTAATTTTACAGTCCATTA 360
 YY 361 GGGGAATTAACATGATTAATTT 383
 DB 361 GGGGAATTAACATGATTAATTT 383

RESULT 4

ABL66834
 ID ABL66834 standard; DNA; 383 BP.
 XX
 AC ABL66834;
 XX
 DT 15-MAY-2002 (first entry)
 XX
 DE Lung cancer related gene sequence SRQ ID NO:5171.
 XX
 KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
 KW cytostatic; gene therapy; antineoplastic; Wilms' tumour; adenocarcinoma;
 KW gene; ds.
 XX
 OS Homo sapiens.
 XX
 PN W0200194629-A2.
 XX
 PD 13-DEC-2001.
 XX
 PF 30-MAY-2001; 2001WO-US10838.
 XX
 PR 05-JUN-2000; 2000US-209473P.
 PR 05-JUN-2000; 2000US-209531P.
 PR 18-SEP-2000; 2000US-231133P.
 PR 18-SEP-2000; 2000US-233617P.
 PR 20-SEP-2000; 2000US-234009P.
 PR 20-SEP-2000; 2000US-234034P.
 PR 20-SEP-2000; 2000US-234052P.
 PR 22-SEP-2000; 2000US-234509P.
 PR 22-SEP-2000; 2000US-234567P.
 PR 25-SEP-2000; 2000US-234923P.
 PR 25-SEP-2000; 2000US-234924P.
 PR 25-SEP-2000; 2000US-235077P.
 PR 25-SEP-2000; 2000US-235082P.
 PR 25-SEP-2000; 2000US-235134P.
 PR 25-SEP-2000; 2000US-235280P.
 PR 26-SEP-2000; 2000US-235637P.
 PR 26-SEP-2000; 2000US-235638P.
 PR 27-SEP-2000; 2000US-235711P.
 PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P.
 PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P.
 PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P.
 PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P.
 PR 28-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236842P.
 PR 29-SEP-2000; 2000US-236891P.
 PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237173P.
 PR 02-OCT-2000; 2000US-237278P.
 PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P.
 PR 02-OCT-2000; 2000US-237316P.
 PR 03-OCT-2000; 2000US-237425P.
 PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237604P.
 PR 03-OCT-2000; 2000US-237606P.
 PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244867P.
 PR 01-NOV-2000; 2000US-245084P.
 XX
 PA (AVAL-) AVALON PHARM.
 XX
 PI Young PE, Augustus M, Carter KC, Edner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;
 XX
 DR WPI: 2002-188264/24.
 XX
 PT Screening for anti-neoplastic agent involves exposing cells to a

PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set
 XX
 PS Claim 1; SEQ ID 5171; 44pp; English.

XX The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL6164
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which
 CC is the data collected with respect to the anti-neoplastic agent as a
 CC result of M1, and the data is sufficient to convey the chemical
 CC structure and/or properties of the agent. M1 can be used in the
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
 CC carcinoma, papillary carcinoma and Wilms' tumour.

XX Sequence 383 BP; 139 A; 65 C; 80 G; 96 T; 3 other;

Query Match 99.2%; Score 380; DB 24; Length 383;

Best Local Similarity 100.0%; Pred. No. 1.8e-100; Mismatches 0; Gaps 0;

Matches 383; Conservative 0; Mismatches 0; Indels 0;

QY 1 CACAGAACAACTCTTTATTTGATGATGAGAAATAGCCCTGTGCTGTTCAAGTG 60
 DB 1 CACAGAACAACTCTTTATTTGATGATGAGAAATAGCCCTGTGCTGTTCAAGTG 60
 QY 61 CAACATACAGATTTGATTTAGAAAAAGAGGAAAGCGGGAAGGAAGCAACTCTTT 120
 DB 61 CAACATACAGATTTGATTTAGAAAAAGAGGAAAGCGGGAAGGAAGCAACTCTTT 120
 QY 121 GAGTCCAAAGTTCNCAACAAAAATGTTAAAGATTTCCACAGCAAGNGCATTTT 180
 DB 121 GAGTCCAAAGTTCNCAACAAAAATGTTAAAGATTTCCACAGCAAGNGCATTTT 180
 QY 121 GAGTCCAAAGTTCNCAACAAAAATGTTAAAGATTTCCACAGCAAGNGCATTTT 180
 DB 121 GAGTCCAAAGTTCNCAACAAAAATGTTAAAGATTTCCACAGCAAGNGCATTTT 180
 QY 181 GCAATATGACATGCAAAACAGGACCTGCTGCTTAAAGAAATCCCTATAATACAGA 240
 DB 181 GCAATATGACATGCAAAACAGGACCTGCTGCTTAAAGAAATCCCTATAATACAGA 240
 QY 181 GCAATATGACATGCAAAACAGGACCTGCTGCTTAAAGAAATCCCTATAATACAGA 240
 DB 181 GCAATATGACATGCAAAACAGGACCTGCTGCTTAAAGAAATCCCTATAATACAGA 240
 QY 241 AAAAGACACTCCACATTTCTGTACGTGAGCTGAGACACAGAAAAAGAACTAAATG 300
 DB 241 AAAAGACACTCCACATTTCTGTACGTGAGCTGAGACACAGAAAAAGAACTAAATG 300
 QY 301 CTTTGGATTTCAAGATTTTGGACACTCTTGATTTCAATTTTTTTTACAGTCCATTAAA 360
 DB 301 CTTTGGATTTCAAGATTTTGGACACTCTTGATTTCAATTTTTTTTACAGTCCATTAAA 360
 QY 361 GGGGAATTAAGTGCATTAATAT 383
 DB 361 GGGGAATTAAGTGCATTAATAT 383

RESULT 5
 ABL67495
 ID ABL67495 standard; DNA: 383 BP.

XX ABL67495;

XX 15-MAY-2002 (first entry)

XX Thyroid cancer related gene sequence SEQ ID NO:5832.

XX Human: cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
 KW stomach; lung; prostate; pancreas; carcinoma; antitumour; carcinous;
 KW cytostatic; gene therapy; antineoplastic; Wilms' tumour; adenocarcinoma;
 KW gene; ds.

OS Homo sapiens.

XX W0200194629-A2.

XX 13-DEC-2001.

XX 30-MAY-2001; 2001WO-US10838.

PR 05-JUN-2000; 2000US-209473P.
 PR 05-JUN-2000; 2000US-209531P.
 PR 18-SEP-2000; 2000US-233133P.
 PR 18-SEP-2000; 2000US-233617P.
 PR 20-SEP-2000; 2000US-234099P.
 PR 20-SEP-2000; 2000US-234034P.
 PR 20-SEP-2000; 2000US-234052P.
 PR 22-SEP-2000; 2000US-234509P.
 PR 22-SEP-2000; 2000US-234567P.
 PR 25-SEP-2000; 2000US-234923P.
 PR 25-SEP-2000; 2000US-234924P.
 PR 25-SEP-2000; 2000US-235077P.
 PR 25-SEP-2000; 2000US-235082P.
 PR 25-SEP-2000; 2000US-235134P.
 PR 25-SEP-2000; 2000US-235280P.
 PR 26-SEP-2000; 2000US-235637P.
 PR 26-SEP-2000; 2000US-235638P.
 PR 27-SEP-2000; 2000US-235711P.
 PR 27-SEP-2000; 2000US-235720P.
 PR 27-SEP-2000; 2000US-235840P.
 PR 27-SEP-2000; 2000US-235863P.
 PR 28-SEP-2000; 2000US-236028P.
 PR 28-SEP-2000; 2000US-236032P.
 PR 28-SEP-2000; 2000US-236033P.
 PR 28-SEP-2000; 2000US-236034P.
 PR 28-SEP-2000; 2000US-236109P.
 PR 28-SEP-2000; 2000US-236111P.
 PR 29-SEP-2000; 2000US-236842P.
 PR 29-SEP-2000; 2000US-236891P.
 PR 02-OCT-2000; 2000US-237172P.
 PR 02-OCT-2000; 2000US-237173P.
 PR 02-OCT-2000; 2000US-237278P.
 PR 02-OCT-2000; 2000US-237294P.
 PR 02-OCT-2000; 2000US-237295P.
 PR 02-OCT-2000; 2000US-237316P.
 PR 03-OCT-2000; 2000US-237425P.
 PR 03-OCT-2000; 2000US-237598P.
 PR 03-OCT-2000; 2000US-237604P.
 PR 03-OCT-2000; 2000US-237606P.
 PR 03-OCT-2000; 2000US-237608P.
 PR 01-NOV-2000; 2000US-244677P.
 PR 01-NOV-2000; 2000US-245084P.
 (AVALON PHARM.
 PA
 PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
 PI Soppet DR, Weaver Z;
 PI
 XX MPI; 2002-188264/24.
 PT Screening for anti-neoplastic agent involves exposing cells to a
 PT chemical agent to be tested for anti-neoplastic activity, and
 PT determining a change in expression of a gene of a signature gene set
 XX
 PS Claim 1; SEQ ID 5832; 44pp; English.

XX The present invention describes a method (M1) for screening for an
 CC anti-neoplastic agent. The method involves exposing cells to a chemical
 CC agent to be tested for anti-neoplastic activity, determining a change in
 CC expression of at least one gene (I) of a signature gene set, where (I)
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL6164
 CC to ABL70110), or is at least 95% identical to (S), where a change in
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
 CC activity and can be used in gene therapy. M1 can be used for screening
 CC an anti-neoplastic agent, and can be used for producing a product which

for SEDA ID No: 1979

Tue May 27 08:34:37 2003

us-09-954-4

RESULT 1	LOCUS	DEFINITION
T87560	550 bp	linear EST 17-MAR-1996
T87560	550 bp	linear EST 17-MAR-1996
YD83310.t1	Soares fetal liver spleen	INFLS Homo sapiens cDNA clone
IMAGE:114811.5'	5'	mRNA sequence.

ACCESSION	T87560	
VERSION	T87560.1	GI:715912
KEYWORDS	EST.	
SOURCE	human.	

ORGANISM	REFERENCE
Homo sapiens	1 (bases 1 to 550)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.	
Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman	
Wiltman, M., Wu, C., Te, M., Lennon, G., Marra, M., Parsons, J.	

TITLE
JOURNAL
COMMENT

Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: estewatson.wustl.edu
Insert Size: 1110

High quality sequence strops: 324 Source: IMAGE Consortium, LNL
This clone is available royalty-free through LNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.

```

Insert Length: 1110      Std Error: 0.00
Seq primer: M13Rp1
High quality sequence stop: 324.
FEATURES
    location/Qualifiers
    source
    1..550

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BASE COUNT	ORIGIN
131 a	108 c
117 g	182 t
	12 others

Query Match	97.8%;	Score 538;	DB 14;	Length 550;
Best Local Similarity	100.0%;	Pred. No. 1.8e+129;		
Matches 549;	Conservative 0;	Mismatches 0;		

QY	2	TAAATACGAGAGCGGAAGATTTTTTTTAAAGAGATATGTAGTTAAATAGTGTGTTAA	61
Db	2	TAAATACGAGAGCGGAAGATTTTTTTTAAAGAGATATGTAGTTAAATAGTGTGTTAA	61
QY	62	AGAACTCTTGGGAATTTCTTAAACAATTGTAAATTTTTTAAACCTTCCACAGAGT	121
Db	62	AGAACTCTTGGGAATTTCTTAAACAATGTAAATTTTTTTTAAACCTTCTACAGAGT	121
QY	122	TGTGTACCAATTCATCATCAACATCATTTATATCTGTAAGTGCCCAAGAGTACAAGTG	181
Db	122	TGTGTACCAATTCATCATCAACATCATTTATATCTGTAAGTGCCCAAGAGTACAAGTG	181
QY	182	CTATACAGCGCTTAAACACCCCTCCCTCCCAACTGTTTAAATTTGAATAGATTTTTGCA	241
Db	182	CTATACAGCGCTTAAACACCCCTCCCTCCCAACTGTTTAAATTTGAATAGATTTTTGCA	241
QY	242	TCACACACATGCTAGAAAGCTTTCCCACTAGTGCCCTGGCAAGGCCCTGCATTTCCAC	301
Db	242	TCACACACATGCTAGAAAGCTTTCCCACTAGTGCCCTGGCAAGGCCCTGCATTTCCAC	301
QY	302	ATCCCATTTACATGTTTCCCACTGCAGAAAGTCTGGGGTTATATCCAGCNTTTTATCN	361
Db	302	ATCCCATTTACATGTTTCCCACTGCAGAAAGTCTGGGGTTATATCCAGCNTTTTATCN	361
QY	362	TGGAGGTGCCCCNTTTCACCCCTGGGTTGGGTTGGGTTGGTTGTTTTTAAANTCA	421
Db	362	TGGAGGTGCCCCNTTTCACCCCTGGGTTGGGTTGGGTTGGTTGTTTTTAAANTCA	421
QY	422	GGAAGATTTCAGGATTCAAAGGGGTCNAGACNTTTTTTAAACCGCGAGATACAGGT	481
Db	422	GGAAGATTTCAGGATTCAAAGGGGTCNAGACNTTTTTTAAACCGCGGAGATACAGGT	481
QY	482	CCNTTTTTTTGCTANGGTTTGTGTGGTTCAGAGNAACCCCAANTTGCCNTTATAGTGTG	541
Db	482	CCNTTTTTTTGCTANGGTTTGTGTGGTTCAGAGNAACCCCAANTTGCCNTTATAGTGTG	541
QY	542	GGTAGTGT 550	
Db	542	GGTAGTGT 550	

for SEQ ID NO: 1979

RESULT 1
ABL66669
ID ABL66669 standard; DNA; 550 BP.
XX
AC ABL66669;
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:5006.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.

continue →

RESULT 2
LOCUS
AM275150
DEFINITION
xv76c12.x1 NCI_CGAP_Lu28 Homo sapiens cdna clone IMAGE:2819062 3',
AM275150
mRNA sequence.
AM275150
VERSION
AM275150.1 GI:6662180
KEYWORDS
EST.
SOURCE
human.
ORGANISM
Homo sapiens
REFERENCE
1 (bases 1 to 405)
Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
AUTHORS
NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
Tumor Gene Index
JOURNAL
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgaps-remail.nih.gov

Tissue Procurement: Chris Moskaluk, M.D., Ph.D., Michael R.
Emmert-Buck, M.D., Ph.D. CDNA Library Preparation: Life
Technologies, Inc. CDNA Library Arrayed by: Christa Prange, The
I.M.A.G.E. Consortium DNA Sequencing by: Washington University
Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www.bio.lnl.gov/bdip/image/image.html
Seq primer: -40up from glbco
High quality sequence stop: 404.
Location/Qualifiers
1. 405
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:2819062"
/clone_lib="NCI_CGAP_Lu28"
/tissue_type="two pooled squamous cell carcinomas"
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site: 1; Salt:
site_2: Not; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies."

BASE COUNT
122 a 77 c 72 g 134 t

Query Match 97.0%; Score 356; DB 10; Length 405;
Best Local Similarity 99.7%; Pred. No. 7; Le-89;
Matches 367; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 TTTGAGGAAATGAGGCAATTTTATTCATATAAAGAGAAAGGATTTGCTCAGATGGGAA 60
DB 5 TTTGAGGAAATGAGGCAATTTTATTCATATAAAGAGAAAGGATTTGCTCAGATGGGAA 64
QY 61 AAAATGAACTCAAGAGTGTGCTACATTTTAACTGTATATCCCATTTTATCTCTGACAGATGTC- 119
DB 65 AAAATGAACTCAAGAGTGTGCTACATTTTAACTGTATATCCCATTTTATCTCTGACAGATGTC 124
QY 120 TTATCTCAGTGTCTCTCAATTCACACCTAAATAATGAGAAATATACACGATGGCTGA 179
DB 125 TTATCTCAGTGTCTCTCAATTCACACCTAAATAATGAGAAATATACACGATGGCTGA 184
QY 180 TTGCTTTGACATGTCTGATTTAGGGAGAGACTTCTACAAACCACTCTCTCTTTTCTCCAG 239
DB 185 TTGCTTTGACATGTCTGATTTAGGGAGAGACTTCTACAAACCACTCTCTCTTTTCTCCAG 244
QY 240 TAAATACCTTTTGTACCTTTGACACCTACATATTTGGAATAAGACAGGTGGCCGAGAGTGA 299
DB 245 TAAATACCTTTTGTACCTTTGACACCTACATATTTGGAATAAGACAGGTGGCCGAGAGTGA 304
QY 300 CATCAAAAGCAGGTTAGGATTTCCGATTTGCTTAAAGGATTTATTTTAAATGAGGCAAGTTCT 359
DB 305 CATCAAAAGCAGGTTAGGATTTCCGATTTGCTTAAAGGATTTATTTTAAATGAGGCAAGTTCT 364
QY 360 ATTGAATC 367
DB 365 ATTGAATC 372

RESULT 3
LOCUS
DEFINITION
646908.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2183102 3',
EST 12-MAY-1999
ACCESSION
A1521564
VERSION
A1521564.1 GI:4435699
KEYWORDS
EST,
SOURCE
human,
ORGANISM
Homo sapiens
REFERENCE
Mammalia; Euthera; Primates; Chordata; Craniata; Vertebrata; Euteleostomi;
I (bases 1 to 416)
NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index

JOURNAL
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgaps-remail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www.bio.lnl.gov/dbp/image/image.html
Insert Length: 4578 Std Error: 0.00
Seq primer: -400P from gibco
High quality sequence stop: 371
POLYA=NO.
Location/Qualifiers
1. 416
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:2183102"
/clone_lib="NCI_CGAP_Gas4"
/tissue_type="poorly differentiated adenocarcinoma with
signed ring cell features"
/lab_host="DH10B"
/note="Organ: stomach; Vector: pCMV-SPORT6; Site_1: salI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT;
Average insert size 1.69 kb. Life Technologies catalog #:
11549-011"
BASE COUNT 120 a 80 c 75 g 141 t
ORIGIN

Query Match 97.0%; Score 356; DB 9; Length 416;
Best Local Similarity 99.7%; Pred. No. 7.2e-89;
Matches 367; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 TTTAGGAATGAGGCAATTTTATTTTCAATTAAGAGAAAGCAATTAATTTTGGCTACAGTGGGAA 60
DB 30 TTTGAGGAATGAGGCAATTTTATTTTCAATTAAGAGAAAGCAATTAATTTTGGCTACAGTGGGAA 89
OY 61 AAAATGGAACCTCAAGAGAGTGGCTTACATTTTAACTGTATCCCTCCATTTTATCTCTGACAGATGTC- 119
DB 90 AAAATGGAACCTCAAGAGAGTGGCTTACATTTTAACTGTATCCCTCCATTTTATCTCTGACAGATGTC 149
OY 120 TTATCTCAGTGTCTCAATTTGACACACTAAATTAATTTGAGAAATACACCAAGTGGCTGA 179
DB 150 TTATCTCAGTGTCTCAATTTGACACACTAAATTAATTTGAGAAATACACCAAGTGGCTGA 209
OY 180 TTGCTTGACATGTCTGATTTTGGGAGAGACTTCTTACAAACCACTCTCTCTCTTTTCTCCAG 239
DB 210 TTGCTTGACATGTCTGATTTTGGGAGAGACTTCTTACAAACCACTCTCTCTCTTTTCTCCAG 269
OY 240 TAAATACCTTTTGGACTTTGACACACTTACCAATTTTGGAAATGAGAGGAGGAGGAGGAGTGA 299
DB 270 TAAATACCTTTTGGACTTTTGGACACCACTTACCAATTTTGGAAATGAGAGGAGGAGGAGTGA 329
OY 300 CATCAAAAGCAGTTAGGATTTTGGAAATGCTTGGCTTAAGGATTTAATTTTAAATGGAGCAGTTCT 359
DB 330 CATCAAAAGCAGTTAGGATTTTGGAAATGCTTGGCTTAAGGATTTAATTTTAAATGGAGCAGTTCT 389
OY 360 ATTGAATC 367
DB 390 ATTGAATC 397

ID ABK64299 standard; DNA; 367 BP.
 AC ABK64299;
 DT 18-JUN-2002 (first entry)
 DE Human benign prostatic hyperplasia gene #194.
 KW Human; benign prostatic hyperplasia; BPH; prostate cancer; gene; ds.
 OS Homo sapiens.
 PN W0200212440-A2.
 PD 14-FEB-2002.
 XX 07-AUG-2001; 2001WO-US24708.
 XX 07-AUG-2000; 2000US-223332P.
 XX 05-JUN-2001; 2001US-0873319.
 PA (GENE-) GENE LOGIC INC.
 PA (NISB) JAPAN TOBACCO INC.
 PI Munger WB, Kulikarni P, Getzenberg RH, Waga I, Yamamoto J;
 DR WPI; 2002-257476/30.
 XX Identifying drugs for and diagnosing benign prostatic hyperplasia, by
 PT detecting expression levels of one or more genes in prostate cells from
 PT patient that are differentially regulated compared to normal prostate
 PS cells -
 XX Disclosure; Page 139; 44pp; English.
 CC The invention relates to a method of diagnosing (I) the onset or
 CC progression of benign prostatic hyperplasia (BPH), or screening (II) for
 CC or identifying an agent that modulates the onset or progression of BPH.
 CC from patients exhibiting different clinical states of prostate
 CC hyperplasia as compared to normal prostate tissue. (I) comprises
 CC detecting the expression levels of one or more genes in prostate cells
 CC from the subject that are differentially regulated compared to normal
 CC prostate cells. (II) comprises preparing a first gene expression profile
 CC of BPH cells or BPH-like cell population, exposing the cells to the
 CC agent, preparing a second gene expression profile of the agent exposed
 CC cells, and comparing the first and second gene expression profiles.
 CC (I) is useful for diagnosing the onset or progression of BPH. (II) is
 CC useful for identifying an agent that modulates the onset or progression
 CC of BPH. The methods are useful to present information identifying
 CC the expression level in a tissue or cells, by comparing the expression
 CC level of genes given in the specification in the tissue or cells to the
 CC level of expression of gene in the database, and displaying the
 CC expression levels of at least one gene in the tissue or cell sample
 CC compared to the expression level in BPH. Agents using (II) are useful for
 CC treating BPH or prostate cancer. ABK64106-ABK64860 represent human
 CC benign prostatic hyperplasia gene sequences of the invention.
 SQ Sequence 367 BP; 111 A; 69 C; 67 G; 120 T; 0 other;
 Query Match
 Best Local Similarity 100.0%; Score 367; DB 24; Length 367;
 Matches 367; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

for SEQ ID NO. 2032

ABL6722
ID ABL6722 standard: DNA: 367 BP.
XX
AC ABL6722:
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:5059.

Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
stomach; lung; prostate; pancreas; carcinoma; antitumor; cancerous;
cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
gene; ds.

OS Homo sapiens.
PN MO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001MO-US10838.

05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 22-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.
PR 25-SEP-2000; 2000US-234923P.
PR 25-SEP-2000; 2000US-234924P.
PR 25-SEP-2000; 2000US-235077P.
PR 25-SEP-2000; 2000US-235082P.
PR 25-SEP-2000; 2000US-235134P.
PR 26-SEP-2000; 2000US-235280P.
PR 26-SEP-2000; 2000US-235637P.
PR 26-SEP-2000; 2000US-235638P.
PR 27-SEP-2000; 2000US-235711P.
PR 27-SEP-2000; 2000US-235720P.
PR 27-SEP-2000; 2000US-235840P.
PR 28-SEP-2000; 2000US-235863P.
PR 28-SEP-2000; 2000US-236028P.
PR 28-SEP-2000; 2000US-236032P.
PR 28-SEP-2000; 2000US-236033P.
PR 28-SEP-2000; 2000US-236034P.
PR 28-SEP-2000; 2000US-236109P.
PR 28-SEP-2000; 2000US-236111P.
PR 29-SEP-2000; 2000US-236842P.
PR 29-SEP-2000; 2000US-236891P.
PR 02-OCT-2000; 2000US-237172P.
PR 02-OCT-2000; 2000US-237173P.
PR 02-OCT-2000; 2000US-237278P.
PR 02-OCT-2000; 2000US-237294P.
PR 02-OCT-2000; 2000US-237295P.
PR 02-OCT-2000; 2000US-237316P.
PR 03-OCT-2000; 2000US-237425P.
PR 03-OCT-2000; 2000US-237598P.
PR 03-OCT-2000; 2000US-237604P.
PR 03-OCT-2000; 2000US-237606P.
PR 03-OCT-2000; 2000US-237608P.
PR 01-NOV-2000; 2000US-244867P.
PR 01-NOV-2000; 2000US-245084P.
XX
PA (AVAL-) AVALON PHARM.
XX
PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PI Soppet DR, Weaver J;
XX
DR WPI: 2002-188264/24.
XX
PT Screening for anti-neoplastic agent involves exposing cells to a
PT chemical agent to be tested for anti-neoplastic activity, and
XX determining a change in expression of a gene of a signature gene set
XX
PS Claim 1; SEQ ID 5059; 44pp: English.
XX
CC The present invention describes a method (M1) for screening for an
CC anti-neoplastic agent. The method involves exposing cells to a chemical
CC agent to be tested for anti-neoplastic activity, determining a change in
CC expression of at least one gene (I) of a signature gene set, where (I)

MAY 27 08:34:37 2003

us-09-954-4

comprises a sequence (S) selected from 8447 sequences (given in ABL61664
to ABL70110), or is at least 95% identical to (S), where a change in
expression is indicative of anti-neoplastic activity. (I) has cytostatic
activity and can be used in gene therapy. M1 can be used for screening
an anti-neoplastic agent, and can be used for producing a product which
is the data collected with respect to the anti-neoplastic agent as a
result of M1, and the data is sufficient to convey the chemical
structure and/or properties of the agent. M1 can be used in the
treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ Sequence 367 BP: 111 A; 69 C; 67 G; 120 T; 0 other;

Query Match 100.0%; Score 367; DB 24; Length 367;
Best Local Similarity 100.0%; Pred No. 2.7e-97;
Matches 367; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 TTTGAGGATGAGCAATTTATTCATAAAGAGAACATTAATTTGTACAGTGGAA 60
1 TTTGAGGATGAGCAATTTATTCATAAAGAGAACATTAATTTGTACAGTGGAA 60
61 AAATGAACCTCAAGAGTTGCTACATTTTACCTGATCCCTTTATCTCTGACAGTCT 120
61 AAATGAACCTCAAGAGTTGCTACATTTTACCTGATCCCTTTATCTCTGACAGTCT 120
121 TATCTCAGTGTCTCAATTCACACTTAAATATTGATGAGAAATACACAGTGGCTAT 180
121 TATCTCAGTGTCTCAATTCACACTTAAATATTGATGAGAAATACACAGTGGCTAT 180
181 TCGTTGACATGCTGTATTTAGGAGACCTTACACACCTCTCTTTTCTCCAGT 240
181 TCGTTGACATGCTGTATTTAGGAGACCTTACACACCTCTCTTTTCTCCAGT 240
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241 AAATCTTTTGAATTTGACACTTACACTTATTTGAAATAGACAGTGGGCAAGTGC 300
301 ATCAAGACAGTTAGGATTTGATGCTTGTCTAGAGATTATTTTATGAGACAGTCTTA 360
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361 TTGATC 367
361 TTGATC 367